

Please take note of the following module purposes for the Bachelor of Computer Science and Information Sciences in Application Development:

Module Code	Module Purpose
MAPC5112	Foundational knowledge of the basic mathematical principles and logical skills to solve Application Development and Networking problems
ITPP5112	Practical and theoretical foundation in developing the skills required as a Professional IT graduate in the workplace.
PRSE6212	Provide theoretical grounding in network security principles as well as the skills needed to protect network resources and communications against security breaches. Introduce students to the use of disaster recovery policies to ensure business continuity.
CONE5111	Basic theoretical concepts of network architecture which include topologies, protocols, media and network standards and models. Students gain practical experience in configuration and troubleshooting basic networks.
CONE5112	Foundational knowledge and practical application of network architecture on selected network concepts. Students will gain the necessary skills to solve a broad range of problems in computer networks, including issues related to routing, switching, performance, scalability, security, and power efficiency.
CLDV6211	Extend the students programming expertise to the cloud. Students will learn how to create scalable applications for the cloud.
CLDV6212	Build on the introduction of cloud computing by focusing on systems architectural programming.
PROG5121	Foundational and practical knowledge of programming through the use of an object-oriented programme.
PROG6112	Augment the skills acquired in Programming 1A by providing students with knowledge of applets, object inheritance and class manipulation and with the skills needed to apply this knowledge to finding programming solutions.
PROG6221	Introduction to a multi-purpose object-oriented programming (OOP) computer programming language. Students are taught the language fundamentals and advanced OOP development features. In depth understanding of predefined structures, objects, classes and object-oriented programming techniques are covered.
PROG6212	Build of the skills and knowledge obtained in Programming 2A and further develop applications through the addition of advanced OOP, GUI and database concepts. This will provide the ability to develop complete software solutions for given business requirements.

PROG7311	To build on the object-oriented concepts learnt in Programming 2B to an advance level, developing large integrated systems.
PROG7312	Cover advance object-oriented programming topics such as data structures, pointers, overloading of operators, templates and overloading of operators
PROG7313	Introduce students to open-source software development for mobile devices.
PROG7314	Introduce students' further knowledge in well-designed; well coded; and business oriented open-source software development for mobile devices.
INSY5111	Provide students with a sound knowledge of concepts related to the components, development and types of Business Information systems and processes.
INSY6112	Provide students with the knowledge and applied skills necessary for the design, implementation and management of database systems.
INSY6211	Focus on analysis of systems in business, with the objective to improve enhance or evaluate such systems. The SDLC (Systems Development Life Cycle) and Object -Oriented principles form the basis of this module and students are taught to consider various important aspects of systems design in terms or requirements, static and dynamic modules, and user interfaces.
INSY6212	Provide knowledge and skills required to effectively apply the Project Management Body of Knowledge elements in planning, organising, controlling and leading Information Technology projects integrated solutions in an organisation.
INSY7213	To advance and develop your applied skills in databases objects using SQL queries and control structures.
INSY7311	This module explores topics related to usability, user experience (UX), interface design, user centred design, accessibility, and evaluation methods.
INSY7314	Provide solid grounding in web application security. It covers authentication and authorisation, session management, as well as database and file security. Vulnerability detection and secure development are important focus of this module.

INSY7315	This is a Work Integrated Learning module, where students are challenged to integrate their knowledge and skills from earlier semesters. Working as an IT project team, they collaborate to develop software applications that meet specific business requirements.
IRIT7311	Introduce students to the process of research and to develop the ability to assess the validity of research findings by defining a research question and to develop an understanding of the processes and techniques of gathering, analysing, interpreting and evaluating data. Emphasis is placed on theoretical principles and procedures as well as ethical considerations. Skills are developed through controlled application of techniques as well as in interpretation and critical analysis in research within ICT.